

Springtime Water Quality Education Programs, projects

From Agriculture Day, to Earth Day, to Arbor Day, and many water fairs and watershed improvement projects in between; it seems like spring time in the perfect time for students and adults alike to reconnect with their outdoor environment.

The season began with Backman Elementary 4th graders visiting the Utah Department of Agriculture and Food building to learn about how agriculture impacts watersheds. The National Agriculture Day celebration included five learning stations through which the students rotated. While students learned from all the demonstrations, the fish dissecting presentation by a representative from the UDAF aquatic health section, was the most popular (at least with the boys).

Most of the spring water fairs and activities took place in April. The San Pitch Watershed Committee hosted the first annual San Pitch Watershed Day in Manti in early April. More than 400 4th graders from throughout SanPete County attended the one-day event.

Despite cool, rainy weather, the youth, their teachers, and parent escorts all seemed to enjoy the educational event. Students learned about ground water and surface water quality, erosion, wildlife and water conservation.

Also in April, long time water fairs were held in Ogden, Weber County and Park City, Summit County. More than 1500 4th grade students attended the Weber Water Fair, and 457 students attended the Park City Water Fair. At each of the major water fairs and many smaller water fairs and watershed days, students got to rotate through several educational demonstrations presented by local or statewide government agency and soil conservation district representatives.

The Beaver Watershed Day, held in early April for the eighth straight year, is a watershed improvement day. The Beaver High School geography classes and volunteers from the Utah Division of Wildlife Resource's Dedicated Hunters' program planted rangeland plants, mostly brows, in upland areas of the watershed, including a recently burned area.



Volunteers from the University of Utah Chapter of the American Society for Civil Engineers joined Utah Federation for Youth volunteers to enhance a trail and remove noxious weeds from a nature park along the Jordan River.

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Backman Kids get "Buggy" for the Earth



Jeff Salt, Great Salt Lake Keeper, helps 4th grade students from Backman Elementary School dress up like stream insects during the "Build A Bug" activity April 20th as part of Earth Week

Earth week marked the end of the annual education partnership between UDAF and Backman Elementary School.

For the second straight year UDAF employees, and partners from other agencies and private organizations, taught the fourth grade classes about watersheds. This year's program included 12 classroom sessions, a National Agriculture Day watershed education fair at the UDAF building in March, and a series of three Earth Day activities at Backman School April 18-22.

UDAF employees W.D. Robinson, Rich Riding and Jack Wilbur were joined by representatives from Extension, the Utah Division of Water Quality, the Great Salt Lake Keeper, and the Utah Federation for Youth, who taught the students about geology, soil science, and several types of water quality monitoring.

Students identified macro invertebrate insects that live in rivers and streams, for example. This type of biological monitoring is important to hydrologists because many of the insects are very sensitive to pollution. If mayflies and other pollution sensitive species are present, the quality of the water is most likely better than if they are not present.

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“Involvement” continued from Front

National Youth Service Day, April 16, 2005, was a day when many volunteers came out and took part in their local communities in many service-oriented projects, including watershed improvement efforts.

One such project was held along the Jordan River, just north of 1700 South in Salt Lake City. Volunteers from the Utah Federation for Youth and the University of Utah Chapter of the American Society of Civil Engineers teamed up to dig out weeds and spread wood chips along a walking trail at a small nature park next to the river.

The Upper Sevier River Watershed Days are scheduled for mid-May and will consist of a service project for high school students and a water education fair for the elementary school students.

For more information about watershed education or watershed improvement volunteer opportunities, visit <http://adoptawaterbody.utah.gov>.



University of Utah Civil Engineering students challenged one another to spread the entire large pile of wood chips during their two hour service project on April 16th. Salt lake City provided the chips.

“Backman” continued from front

Students also created environmental arts and crafts and played games that teach about conservation and stewardship.

The classroom lessons and activities that led up to Earth Week were delivered almost weekly by representative of the Utah Department of Agriculture and Food (UDAF), Utah Division of Water Quality, and a local non-profit organization, the Utah Federation for Youth. The three organizations teamed up to pilot a new 4th grade watershed education curriculum as part of UDAF’s ongoing partnership with Backman Elementary School, three blocks north of the Department’s main building in the Rose Park neighborhood of Salt Lake City.

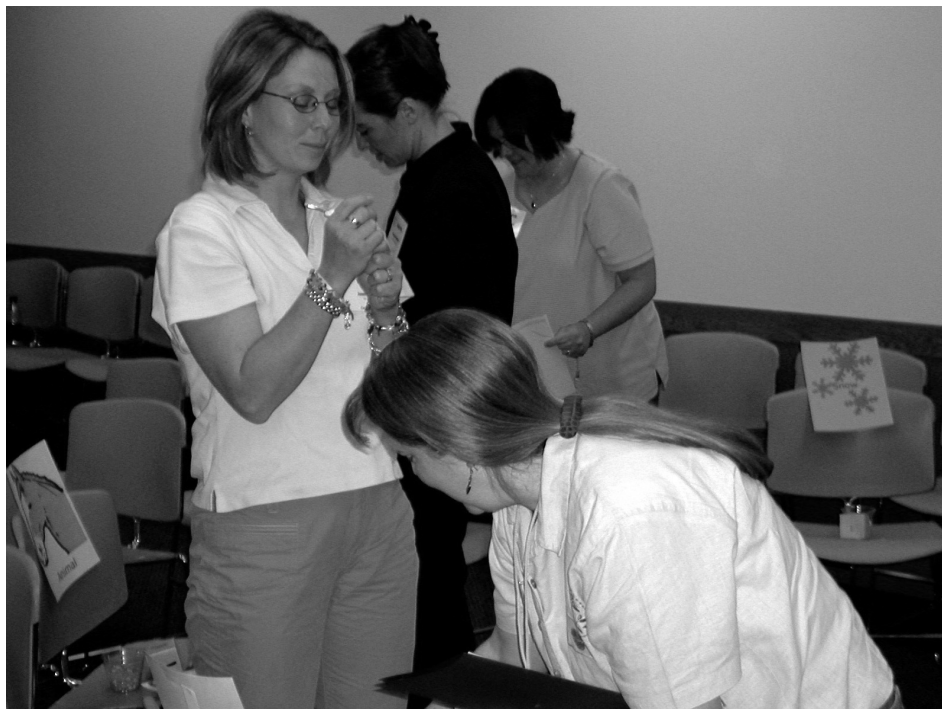
The set of 12 interactive lesson plans covers most of the five core elements of the required 4th grade science curriculum for Utah public schools. The curriculum, customized for Salt Lake City Public Utilities, watershed section, focuses on the Jordan River Watershed. The lessons can be customized for other parts of the state.

Students learn about the water cycle, plants, animals, soils, water pollution sources, and diverse water users. Water users in the Provo-Jordan River watershed includes agriculture, wildlife, communities, power generation, mining, and various industries.



Backman Elementary School students make “talking sticks” on Earth Day out of small tree limbs, bird feathers and poster paints. Many American Indian tribes used talking sticks in formal ceremonies and other public gatherings. Like the Native Americans did, these students learn to recycle and reuse nature’s gifts.

New School Earth Week Program Unveiled to PTA



Local school PTA representatives from throughout Utah learned about a new Earth week education initiative to start in April 2006.

The Utah Federation for Youth (UFY) and the Utah Department of Agriculture and Food (UDAF) are teaming up with the Utah PTA for the first annual Utah Schools Earth Week celebration, scheduled for April 16-22, 2006.

Representatives from UDAF and UFY unveiled the concept for the week-long celebration at the annual Utah PTA convention in Provo, UT, in mid May.

“We’ll provide PTA

presidents and teachers with suggested activities they can do each day during the week,” said Jack Wilbur, Utah Department of Agriculture and Food, first year co-sponsor.

The theme for the first year is the “Wonderful World of Water.” There will be grade specific lesson plans that can be used in the 4th and 9th grade and ideas for public address announcements and assemblies that can be done for entire schools and all grade levels.

For more information, go to the UFY web site: www.ufyi.org

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Mountain Snow Piles Up, Valleys Saturate with Rain as Water Experts Worry About Spring Runoff

So far in 2005, Washington, Cache and Box Elder counties have experienced flooding from heavy rainfall and snow melt. As Utahans progress further into May and the peak of the runoff season for most of the state, experts brace for even more potential destruction and devastation from high water.

While it seems hard to believe that Utah could go from six years of drought and nearly empty reservoirs, to snow pack that is 200 percent of normal or higher in some locations and overflowing reservoirs, all of the necessary conditions came together to make the quick turnaround possible. That’s the word from Randy Julander, snow survey supervisor, USDA, Natural Resources Conservation Service, Salt Lake City.

According to Julander, autumn 2004 was fairly wet in many parts of the state. That precipitation replaced some of the soil moisture lost during Utah’s hot, dry summers. “The more moisture, the more runoff,” said Julander, explaining that the drier the soils in the mountains and rangelands are going into the winter and snow pack season, the more the melting snow will soak into the thirsty soil the following spring. That results in less runoff to fill streams and reservoirs.

The second factor needed to reverse a drought is an above-average snow pack. That has been the case for virtually the entire state the entire season. As of April 30, 2005, the statewide snow pack average is more than 150 percent



Utah's wet spring has been for the birds-- the ducks -- really -- as record valley rain and mountain snow continued well into mid-May and press time for this publication.

of normal. The Virgin River Basin are over 300 percent of normal, while other Southern Utah watersheds have well over 200 percent of normal snow pack.

The final factor needed to go from drought to flood virtually over night is a cool, wet spring. Despite a fairly, warm, dry March, most of the

state has seen a cooler and wetter than normal pattern for the past several weeks.

All of these factors concern local and state water officials, farmers, stream side residents and many others throughout Utah as they wonder how fast and dramatic the inevitable warm up will be as May marches on.

Morgan Field Day Connects Students to the Farm



The annual Morgan County Farm Field Day is more than a chance for local elementary school students to get out of the classroom for a day. It is increasing becoming a link to the past for a rapidly urbanizing community.

From Mountain Green to Porterville and nearly everywhere in between, subdivisions are popping up in Morgan County at an unprecedented rate. The once predominantly farming communities in the Morgan Valley are now more bedroom communities for Ogden, and to a lesser

degree Park City and Salt Lake City.

Local farmers and ranchers are afraid the county’s youngest residents are becoming detached from the farm and an agricultural life-style. The farm field day is designed to give the students a chance to see farm animals close up, and learn about how farmers and ranchers take care of the land, their crops and their animals.

As usual, the Utah Department of Agriculture and Food brought a water pollution activity. This year, Jack Wilbur, nonpoint source public

information officer, borrowed the Enviroscope watershed model from the Utah Division of Water Quality to introduce the students to ways everyone within a watershed can cause water pollution and ways everyone can be part of the solution to water pollution.

The Enviroscope model is a hard plastic model that replicates many of the things found in watersheds such as roads, mountains, farms, subdivisions, construction sites, industrial factories, and water bodies.

Cocoa powder, punch drink mix powder and soy sauce are used to represent, fertilizer, road salts, hazardous chemicals, soil, manure and other potential water pollutants.

Another popular rotation was the roping station. Students learned how ranchers and cow-boys use ropes to control animals on the range. Some of the students even got to practice.

The day included lunch and a lot of milk.



Mark Your Calendars!

2005 NPS Conference set for September

September 27 - 29, 2005 in Salt Lake City at the Sheraton City Centre

Urban nonpoint source pollution will be the major focus this year as the Utah Nonpoint Source Water Quality Conference comes to Salt Lake City for the first time in its 16 year history.

"We're excited about having the conference in Salt Lake City and bringing in storm water and other urban issues," said Roy Gunnell, conference co-chair.

The theme of the 2005 Utah NPS Conference is "Managing water quality in a growing

West." Smart growth, flood plain management, storm water and other issues related to NPS water quality will be discussed along with more traditional agricultural and riparian water quality topics. Some potential topics to be addressed include:

- Quality growth in emerging communities, floodplain management, meander corridors and other related issues in the wake of recent flooding in Southern Utah.

- Storm water Phase II current issues of concern.
- Public information and education programs
- NPS implementation successes

A call for presenters will be distributed in March and the conference registration packet and draft agenda will be available early summer.

Those documents and other information about the conference will be posted on the Utah Department of Agriculture and Food web site: <http://www.ag.utah.gov/mktcons/npsconf.html>.



2005 U^{TAH} NPS WATER QUALITY CONFERENCE

SEPTEMBER 27-29, 2005

Sheraton City Centre, Salt Lake City, Utah

CALL FOR PRESENTATIONS

"Managing Water Quality in a Growing West" is the theme of this year's conference. Conference sessions should include a mix of urban and suburban stormwater quality, and, rural and agricultural non point source water quality topics and issues.



PRESENTATION PROPOSALS

The conference planning committee is looking for several 30 minute presentations to be delivered during sessions on Tuesday September 27 or Thursday September 29.

Proposals should be 200-300 words. The presentation title, principle presenter's name and contact information, including e-mail should appear at the top of the page.

Proposals should clearly define the topic to be discussed and what the audience should expect to learn from the presentation.

Proposals are due June 3, 2005



TOPIC AREAS

Proposals for presentations about any nonpoint source pollution-related topic or issue are eligible for consideration. A few suggested topics include:

Low impact development (i.e. transportation, permeable paving)
Construction site erosion control BMPs
Innovative local stormwater control programs
Program reporting and effectiveness
Rural watershed improvements and protections programs
AFO/CAFO implementation successes
Source water protection
Water fairs, watershed days and other I&E efforts



Submission Information

E-mail submissions preferred. Prepare your proposal in Microsoft Word, Word Perfect, or a generic text format and attach it to an email to: jackwilbur@utah.gov

Traditional mail submissions should be sent to:

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